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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/905,036	07/12/2001	Jonathan J. Hull	015358-006000US	2402
20350	7590	01/13/2005	EXAMINER	
TOWNSEND AND TOWNSEND AND CREW, LLP TWO EMBARCADERO CENTER EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834			CHEN, CHONGSHAN	
			ART UNIT	PAPER NUMBER
			2162	

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/905,036

Applicant(s)

HULL ET AL.

Examiner

Chongshan Chen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/2/04</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This action is responsive to Amendment filed on 15 July 2004. Claims 1-44 are pending in this Office Action.

#### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 2 August 2004 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

#### ***Response to Arguments***

3. Applicant's arguments filed on 15 July 2004 have been fully considered but they are not persuasive.
4. As per applicant's arguments regarding the reference does not teach "identifying the first document displayed to the user" have been considered but are not persuasive. Cooper teaches identifying the first document displayed to the user (Cooper, col. 4, lines 17-19, "the user then selects one or more documents from the list (225) and requests that they be displayed"). In the system of Cooper, a user enters a query into a search system. The search system returns a list of relevant documents. The user selects one or more documents to be displayed, then the system of Cooper recognizes the keywords or concepts in the displayed document and displays additional information related to the keywords or concept. The claimed invention does not disclosed where the first document is come from, therefore, the examiner interprets the first document is the search result of a user entered query. The system of Cooper identifies the first document

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displayed to the user (Cooper, col. 4, lines 17-19). Then, the document viewed by the user is used as a starting point for determining the additional relevant information to the keywords and concepts.

5. As per applicant's arguments regarding the reference does not teach "identifying at least a section of the first document" have been considered but are not persuasive. The claimed "a section of the first document" could be part of the document or the whole document. The system of Cooper extracts keywords or concepts from the displayed section of document, which could be either a part of the document or the whole document (Cooper, col. 3, lines 12-26, col. 4, lines 13-25). Therefore, the argument is not persuasive.

As per applicant's arguments regarding the reference does not teach "extracting a first set of information objects ... comprising: ... a first type and ... a second type, wherein the first type is different from the second type" have been considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Sweet et al. (US 6,415,278 B1). Cooper teaches extracting text object from the document (Cooper, col. 4, lines 29-67), but does not teach extract other type of information object. Sweet teaches extracting all types of objects from the document (e.g., words, images, lists, frames or tables) (Sweet, col. 3, lines 2-4). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Cooper by incorporating an extraction module that can extract different type of objects (e.g., words, images, lists, frames or tables) as disclosed by Sweet (Sweet, col. 3, lines 2-4). The motivation being to enable the system to extract all type of objects (e.g., words, images, lists, frames or tables) from the document.

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6. As per applicant's arguments regarding the reference does not teach "determining degree of relevancy information for a second set of information objects ..." have been considered but are not persuasive. It is unclear where the second set of information objects is from, whether the second set of information objects is associated with the first section of the first document displayed to the user, or other sections of the first document displayed to the user, or other documents; and it is unclear what type of information object is the second set of information object, whether the information objects in the second set are the same type or different type. The examiner interprets the second set of information objects as documents. The relevancy information is between documents. Therefore, the arguments are not persuasive.

7. As per applicant's arguments regarding the reference does not teach "selecting a third set of information objects from information object in the second set of information objects ..." have been considered but are not persuasive. Because the applicants do not disclose what the second and third set of information objects are and where they are from, the examiner interprets the second and third set of information objects as documents. In the system of Cooper, a user selects a first documents to be displayed, then the system recognizes the keywords or concepts in the displayed document and displays additional documents related to the keywords or concept (Cooper, col. 5, lines 39-50, "lists of these terms/documents, called related lists, are returned ... and displayed in a list box on the client screen ...", the related lists are the claimed third set of information objects). Therefore, the arguments are not persuasive.

8. As per applicant's arguments regarding the reference does not teach "wherein the section of the first document displayed to the user is less than the entire first document" have been considered but are not persuasive. It well known that a display screen can display the whole

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document if the document is short. However, when the document has multiple pages, then the screen would not be able to display the whole document altogether, the screen can only display part of the document. Under this situation, the section of the first document displayed to the user is less than the entire first document. Therefore, the arguments are not persuasive.

9. As per applicant's arguments regarding the reference does not teach "identifying a plurality of selection techniques for determining degree of relevancy information for the first set of CPIOs" have been considered but are not persuasive. The examiner interprets the content provider information objects (CPIOs) as documents. Cooper teaches identifying selection technique for the text document to determining relevant information for the document (Cooper, col. 4, line 29 – col. 5, line 50). Furthermore, applicants admit in the disclosure that several other techniques known to those of skill in the art may also be used to determine the degree of relevancy (specification, page 21, [80]). Therefore, the arguments are not persuasive.

### ***Claim Rejections - 35 USC § 112***

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 14, 28 and 42-44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

12. As per claims 14, 28 and 42, the invention claims "for each selection technique in the plurality of selection techniques, applying the selection technique in the plurality of selection techniques, applying the selection technique to generate degree of relevancy information for the

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CPIOs, the degree of relevancy information indicating the relevancy of the CPIOs to the UDIOs calculated using the selection technique”. The examiner interprets the content provider information objects (CPIOs) as text documents. The UDIOs comprising information of a first type and a second type, wherein the first type is different from the second type, for example, image, or sound, etc. It is unclear how a selection technique (for example a text selection technique) can be applied to generate relevancy information for UDIOs of image or sound type. Claims 43 and 44 are rejected because of dependency.

***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

15. Claims 1-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper et al. (“Cooper”, 6,101,503) in view of Sweet et al. (US 6,415,278 B1).

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As per claim 1, Cooper teaches a method of providing information to a user based upon contents of a first document displayed to the user, the method comprising:

identifying the first document displayed to the user (Cooper, col. 4, lines 13-20);

identifying at least a first section of the first document (Cooper, col. 3, lines 12-26, col. 4, lines 13-28);

extracting a first set of information objects from the first section of the first document (Cooper, Fig. 2 & 4, col. 3, lines 17-18);

determining degree of relevancy information for a second set of information objects, the degree of relevancy information indicating the relevancy of information objects in the second set of information objects to information objects in the first set of information objects (Cooper, Fig. 4, element 430, 450, col. 4, line 13 – col. 5, line 50); and

selecting a third set of information object from information objects in the second set of information objects based upon the degree of relevancy information determined for information objects in the second set of information objects, wherein information objects in the third set of information objects store information to be output to the user when the first document is being displayed to the user (Cooper, Fig. 4, element 460, col. 5, lines 39-50).

Cooper does not explicitly disclose the first set of information objects comprising at least a first information object comprising information of a first type and a second information object comprising information of a second type, wherein the first type is different from the second type. Sweet teaches a first information object comprising information of a first type and a second information object comprising information of a second type, wherein the first type is different from the second type (Sweet, col. 3, lines 2-4). Therefore, it would have been obvious to one of



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ordinary skill in the art at the time the invention was made to modify the system of Cooper by incorporating an extraction module that can extract different type of objects (e.g., words, images, lists, frames or tables) as disclosed by Sweet (Sweet, col. 3, lines 2-4). The motivation being to enable the system to extract all type of objects (e.g., words, images, lists, frames or tables) from the document.

As per claim 2, Cooper and Sweet teach all the claimed subject matters as discussed in claim 1, and further teach the first section of the first document corresponds to a section of the first document displayed to the user, wherein the section of the first document displayed to the user is less than the entire first document (Cooper, col. 3, line 12 - col. 4. line 60).

As per claim 3, Cooper and Sweet teach all the claimed subject matters as discussed in claim 1, and further teach the first section of the first document corresponds to the entire first document (Cooper, col. 3, line 12 - col. 4. line 60).

As per claim 4, Cooper and Sweet teach all the claimed subject matters as discussed in claim 1, and further teach extracting the first set of information objects from the first section of the first document comprises: for each information object in the first set of information objects: identifying a type of the information object based upon contents of the information object; determining a first content recognition technique based upon the type of the information object (Cooper, col. 4, lines 30-40); and applying the first content recognition technique to the information object to determine information related to the contents of the information object (Cooper, col. 3, lines 12-26).

As per claim 5, Cooper and Sweet teach all the claimed subject matters as discussed in claim 1, and further teach determining the degree of relevancy information for the second set of information objects comprises:

identifying a plurality of selection techniques for determining the degree of relevancy information (Cooper, col. 4, lines 15-18); and

for each selection technique in the plurality of selection techniques, applying the selection technique to generate relevancy scores for information objects in the second set of information objects, the relevancy scores indicating the relevancy of information objects in the second set of information objects to information objects in the first set of information objects calculated using the selection technique (Cooper, Fig. 4, col. 4, lines 13-40); and

selecting the third set of information objects comprises:

selecting information objects from the second set of information objects to be included in the third set of information objects based upon the relevancy scores for information objects in the second set of information objects calculated using the plurality of selection techniques (Cooper, Fig. 4, col. 4, lines 13-40).

As per claim 6, Cooper and Sweet teach all the claimed subject matters as discussed in claim 1, except for explicitly disclosing calculating an aggregate relevancy score for the information object by aggregating the relevancy scores generated for the information object by applying the plurality of selection techniques; and selecting the information object to be included in the third set of information objects if the aggregated relevancy score calculated for the information object is above a threshold value. However, the search system of Cooper ranks a list of relevant documents (Cooper, col. 4, lines 15-17). Therefore, it would have been obvious to

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one of ordinary skill in the art at the time the invention was made to modify the Cooper and Sweet's combined system by using the rank function to calculate an aggregate relevancy score and selecting documents that are above a threshold value. The motivation being to remove non-relevant documents and display only the most relevant document to the user. This will save the user time to navigate and review the documents.

As per claim 7, Cooper and Sweet teach all the claimed subject matters as discussed in claim 1, and further teach identifying a first selection technique and a second selection technique for determining the degree of relevancy information; and applying the first selection technique to generate a first set of relevancy scores for information objects in the second set of information objects, the first set of relevancy scores indicating the relevancy of information objects in the second set of information objects to information objects in the first set of information objects calculated using the first selection technique; applying the second selection technique to generate a second set of relevancy scores for information objects in the second set of information objects, the second set of relevancy scores indicating the relevancy of information objects in the second set of information objects to information objects in the first set of information objects calculated using the second selection technique; and selecting the third set of information objects comprises: selecting information object form the second set of information objects to be included in the third set of information objects based upon the first set of relevancy scores and the second set of relevancy scores (Cooper, col. 4, line 13- col. 5, line 50, applicants' specification, page 21, [80]).

As per claim 8, Cooper and Sweet teach all the claimed subject matters as discussed in claim 1, and further teach determining a plurality of concepts of interest to the user; determining

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relevancy of each information object in the first set of information objects to each concept in the plurality of concepts; determining relevancy of each information object in the second set of information objects to each concept in the plurality of concepts; and calculating the first set of relevancy scores based upon the relevancy of each information object in the first set of information objects to each concept in the plurality of concepts and based upon the relevancy of each information object in the second set of information objects to each concept in the plurality of concepts, wherein each relevancy score in the first set of relevancy scores indicates a degree of relevancy of an information object in the second set of information objects to an information object in the first set of information objects for a particular concept included in the plurality of concepts (Cooper, col. 4, col. 3, lines 13-26).

As per claim 9, Cooper and Sweet teach all the claimed subject matters as discussed in claim 1, and further teach for each information object in the first set of information objects: identifying a type of the information object based upon contents of the information object; determining a comparison technique based upon the type of the information object; and for each information object in the second set of information objects, applying the comparison technique to generate a relevancy score for the information object in the second set of information objects, the relevancy score indicating a degree of relevance of the information object in the second set of information objects to the information object in the first set of information objects using the comparison technique determined based upon the type of the information object in the first set of information objects (Cooper, Fig. 2-4, col. 3, lines 12-26, col. 4, lines 13-40).

As per claim 10, Cooper and Sweet teach all the claimed subject matters as discussed in claim 1, and further teach communicating the third set of information objects to a user system

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which is used to output information stored by information objects in the third set of information objects to the user (Cooper, Fig. 1-4).

As per claim 11, Cooper and Sweet teach all the claimed subject matters as discussed in claim 1, and further teach the first document is displayed to the user using an access program and the information stored by information objects in the third set of information objects is output to the user in a predetermined area of the access program (Cooper, Fig. 1-4).

As per claim 12, Cooper and Sweet teach all the claimed subject matters as discussed in claim 1, and further teach the access program is a web browser and the first document is a web page (Cooper, col. 3, lines 50-62).

Claim 13 is rejected on grounds corresponding to the reasons given above for claim 1.

As per claim 14, Cooper teaches a method of providing information to a user based upon contents of a document displayed to the user, the method comprising:

accessing a first set of content provider information objects (CPIOs) (Cooper, Fig. 2-4, col. 3, line 12 - col. 4, line 40);

identifying the document displayed to the user (Cooper, col. 4, lines 13-20);

extracting a first set of user document information objects (UDIOs) from the document (Cooper, Fig. 2-4, col. 4, lines 21-40);

identifying a plurality of selection techniques for determining degree of relevancy information for the first set of CPIOs (Cooper, col. 4, lines 29-67);

for each selection technique in the plurality of selection techniques, applying the selection technique to generate degree of relevancy information for the CPIOs, the degree of

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relevancy information indicating the relevancy of the CPIOs to the UDIOs calculated using the selection technique (Cooper, col. 4, line 13 – col. 5, line 50); and

selecting a second set of CPIOs from the first set of CPIOs based upon the degree of relevancy information for the CPIOs calculated using the plurality of selection techniques, wherein information objects in the second set of CPIOs store information to be output to the user when the document is being displayed to the user (Cooper, col. 5, lines 39-50).

Cooper does not explicitly disclose the first set of UDIOs comprising a first UPIO of a first type and a second UDIO of a second type, wherein the first type is different from the second type. Sweet teaches the first set of UDIOs comprising a first UPIO of a first type and a second UDIO of a second type, wherein the first type is different from the second type (Sweet, col. 3, lines 2-4). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Cooper by incorporating an extraction module that can extract different type of objects (e.g., words, images, lists, frames or tables) as disclosed by Sweet (Sweet, col. 3, lines 2-4). The motivation being to enable the system to extract all type of objects (e.g., words, images, lists, frames or tables) from the document.

Claims 15-27 and 29-41 are rejected on grounds corresponding to the reasons given above for claims 1-13.

Claims 28 and 42 are rejected on grounds corresponding to the reasons given above for claim 14.

As per claim 43, Cooper and Sweet teach all the claimed subject matters as discussed in claim 42, and further teach at least one CPIO included in the first set of CPIOs is provided by a content provider system coupled to the server system (Cooper, Fig. 1).

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As per claim 44, Cooper and Sweet teach all the claimed subject matters as discussed in claim 42, and further teach the first set of CPIOs comprises a first CPIO and a second CPIO, wherein the first CPIO is provided by a first content provider system coupled to the server system and the second CPIO is provided by a second content provider system coupled to the server system (Cooper, Fig. 1).

### *Conclusion*

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chongshan Chen whose telephone number is (571)272-4031. The examiner can normally be reached on Monday - Friday (8:00 am - 4:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E Breene can be reached on (571)272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chongshan Chen  
January 6, 2005

  
JEAN M. CORRIELUS  
PRIMARY EXAMINER